IN THE CLAIMS

Claims 1-2. (Canceled)

3. (Currently Amended) An image-processing apparatus for processing the image data input from an image-handling device and then outputting the image data to another image-handling device, said apparatus comprising:

black adaptation correction means for correcting the image data, such that colors of the image data produced by the image-handling devices are similar, by: ~~applying a black adaptation conversion $X_sY_sZ_s$ to $X_{s,k}Y_{s,k}kZ_{s,k}$ in order to determine optimal color space $X_{op}Y_{op}Z_{op}$ such that the colors of the images produced by the image-handling devices are similar~~

first converting means for converting an RGB value to a first XYZ value;

second converting means for converting the first XYZ value to a first LMS value;

third converting means for converting the first LMS value to a first $X_{op}Y_{op}Z_{op}$ value for use in an optical color space;

first performing means for performing image editing processing on the first $X_{op}Y_{op}Z_{op}$ value to obtain a $L_sa_sb_s$ value;

second performing means for performing image editing processing on the $L_sa_sb_s$ value;

fourth converting means for converting the edited $L_sa_sb_s$ value to a second $X_{op}Y_{op}Z_{op}$ value;

fifth converting means for converting the second $X_{op}Y_{op}Z_{op}$ value to a second LMS value for use in a LMS color space;

sixth converting means for converting the second LMS value to a second XYZ value; and

seventh converting means for converting the second XYZ value to a CMY value;

wherein image data processing in the optical color space does not depend on a dynamic range of the image-handling devices.

4. (Currently Amended) A method of processing image data input from an image-handling device before the image data is output to another image-handling device, said method comprising the step of:

correcting the image data, such that colors of the image data produced by the image-handling devices are similar, by: ~~applying a black adaptation conversion from $X_s Y_s Z_s$ to~~ ~~$X_{s,k} Y_{s,k} k Z_{s,k}$ in order to determine optimal color space $X_{op} Y_{op} Z_{op}$ such that the colors of the~~ ~~images produced by the image-handling devices are similar~~

converting an RGB value to a first XYZ value;

converting the first XYZ value to a first LMS value;

converting the first LMS value to a first $X_{op} Y_{op} Z_{op}$ value for use in an optical color space;

performing image editing processing on the first $X_{op} Y_{op} Z_{op}$ value to obtain a $L_s a_s b_s$ value;

performing image editing processing on the $L_s a_s b_s$ value;

converting the edited $L_s a_s b_s$ value to a second $X_{op} Y_{op} Z_{op}$ value;

converting the second $X_{op} Y_{op} Z_{op}$ value to a second LMS value for use in a LMS color space;

converting the second LMS value to a second XYZ value; and

converting the second XYZ value to a CMY value;

wherein image data processing in the optical color space does not depend on a dynamic

range of the image-handling devices.